

REMARKS

By the foregoing Amendment, Claims 1, 13, 26 and 27 have been amended.

Favorable reconsideration of the application is respectfully requested.

Claims 1-4, 7-10, 13-17, 20-23, 27, 28 and 31-35 were rejected under 35 U.S.C. 102(b) on the grounds of anticipation by Briles, disclosing a self-sealing nut assembly with a deformable sealing insert 16, and a captive washer 14 that fits over the sealing insert and the base of the nut body 12. The Examiner indicated that the "collar" of Briles is read to be inclusive of both the nut body 12 and the captive washer 14, and that the sealing insert is retained entirely within the "collar" including the nut body and captive washer. Claim 1 has been amended to recite "an internal sealing insert adapted to be tightly sealed entirely in the swage collar in engagement with the fastener when installed on said composite assembly of workpieces." Claims 13, 26 and 27 have been similarly amended. Support for the amendment can be found in the specification at page 8, lines 2-5. At column 6, lines 24 to 30, Briles explains that although the upturned retaining lip of the captive washer generally encloses the passages 52, the retaining lip does not seal off the passages, so that air is permitted to bleed out the outer ends of the passages as sealing material flows into the passages. Briles teaches away from tightly sealing a sealing material within a swage collar, at column 1, lines 53-67, and at column 2, lines 2-15, explaining that sealing a sealing material so as to squeeze a deformable sealing ring or sleeve into the counterbore when a nut is tightened is to be avoided. Briles explains at column 2, lines 2-15 "For example, when the nut is tightened up a very high hydrostatic

pressure can be developed in the nut counterbore, which could rupture the nut or develop a leak path where the flow of sealing material tends to be channeled out between the nut face and the structure."

In contrast, in the present invention, the internal sealing insert is tightly sealed in engagement with the fastener and entirely in the swage collar when installed on the composite assembly of workpieces. As is described in the specification at page 8, lines 2-5, "Sufficient force is applied to the swaging collar to cause plastic deformation in the swaging collar so that the material of the swaging collar is force into the threads, thereby bringing the sealing element into tight sealing engagement with the pin as shown, e.g., in Figures 1 and 2." It is therefore respectfully submitted that Briles does not teach, disclose or suggest tightly sealing an internal sealing insert entirely in a swage collar in engagement with a fastener when installed on an assembly of workpieces, as is claimed, and that Claims 1-4, 7-10, 13-17, 20-23, 27, 28 and 31-35 are novel and inventive over Briles. It is therefore respectfully submitted that the rejection of Claims 1-4, 7-10, 13-17, 20-23, 27, 28 and 31-35 on the grounds of anticipation by Briles should be withdrawn.

Claims 26-28, 31, 33 and 34 were rejected under 35 U.S.C. 103(a) on the grounds of obviousness from Briles in view of Armour. It is respectfully submitted that Briles and Armour, either when taken individually or together, do not teach, disclose or suggest tightly sealing an internal sealing insert entirely in a swage collar in engagement with a fastener when installed on an assembly of workpieces, as is claimed. It is therefore respectfully submitted that Claims 26-28, 31, 33 and 34 are novel and inventive over

Briles and Armour, and that the rejection of Claims 26-28, 31, 33 and 34 on the grounds of obviousness from Briles in view of Armour should be withdrawn.

Claims 5, 6, 18, 19, 29 and 30 were rejected under 35 U.S.C. 103(a) on the grounds of obviousness from Briles in view of Armour, and further in view of Rath. It is respectfully submitted that Briles, Armour, and Rath, either when taken individually or together, do not teach, disclose or suggest tightly sealing an internal sealing insert entirely in a swage collar in engagement with a fastener when installed on an assembly of workpieces, as is claimed. It is therefore respectfully submitted that Claims 5, 6, 18, 19, 29 and 30 are novel and inventive over Briles, Armour, and Rath, and that the rejection of Claims 5, 6, 18, 19, 29 and 30 on the grounds of obviousness from Briles in view of Armour and further in view of Rath should be withdrawn.

Claims 11, 12, 24 and 25 were rejected under 35 U.S.C. 103(a) on the grounds of obviousness from Briles in view of Breed. It is respectfully submitted that Briles and Breed, either when taken individually or together, teach, disclose or suggest tightly sealing an internal sealing insert entirely in a swage collar in engagement with a fastener when installed on an assembly of workpieces, as is claimed. It is therefore respectfully submitted that Claims 11, 12, 24 and 25 are novel and inventive over Briles and Breed, and that the rejection of Claims 11, 12, 24 and 25 on the grounds of obviousness from Briles in view of Breed should be withdrawn.



In light of the foregoing amendments and remarks, it is respectfully submitted that the application should now be in condition for allowance, and an early favorable action in this regard is respectfully requested.

Respectfully submitted,

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